

WHAT IS CLAIMED IS:

1. A polypeptide participating in pyridoxine biosynthesis, selected from a group comprising (a), (b) and (c) polypeptide:
  - 5 (a) polypeptide containing all portion of the amino acid sequence set forth in SEQ ID NO. 2;
  - (b) polypeptide containing a substantial portion of the amino acid sequence set forth in SEQ ID NO. 2;
  - (c) polypeptide substantially similar to the above (a) or (b) polypeptide
- 10 2. A polynucleotide encoding the polypeptide of claim 1.
3. A method for inhibiting a plant growth, which comprises a step of inhibiting the expression or function of a polypeptide that participates in pyridoxine biosynthesis and  
15 consists of the amino acid sequence of SEQ ID NO. 2 or its equivalent sequence.
4. The method according to claim 3, in which the step is performed by introducing an anti-sense nucleotide against the polynucleotide set forth in claim 2 into a plant.
- 20 5. The method according to claim 3, in which the step is performed by introducing a recombinant vector containing an anti-sense nucleotide against the polynucleotide set forth in claim 2 into a plant.
6. The method according to claim 3, in which the step is performed by introducing  
25 *Agrobacterium tumefaciens* transformant transformed with a recombinant vector containing an anti-sense nucleotide against the polynucleotide set forth in claim 2, into a plant.
7. The method according to claim 3, in which the step is performed by any one

technique that is selected among gene deletion, gene insertion, T-DNA insertion, homologous recombination, transposon tagging, small interfering RNA (siRNA) and the like.

8. A process for screening a growth inhibitor of plants, which comprises a step for  
5 screening a substance inhibiting the expression or function of polypeptide that participates in pyridoxine biosynthesis and consists of the amino acid sequence of SEQ ID NO. 2 or its equivalent sequence.

9. A composition for inhibiting plant growth comprising a growth inhibitor screened  
10 by the process set forth in claim 8.

10. The composition according to claim 9, in which the inhibitor is selected from a group consisting of (1) the anti-sense nucleotide against the polynucleotide of claim 2; (2) the recombinant vector containing the anti-sense nucleotide against the polynucleotide of  
15 claim 2; and (3) the transformant of *Agrobacterium tumefaciens* transformed with the recombinant vector containing the anti-sense nucleotide against the polynucleotide of claim 2.